



Docket No.: Chen 2-3-1-2-2 (LU05021USU)

Serial No.: 10/724,174

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Chen et al.

DOCKET NO.: Chen 2-3-1-2-2 (LU05021USU)

SERIAL NO.: 10/724,174

GROUP ART UNIT: 2883

DATE FILED: December 1, 2003

EXAMINER: Kianni, Kaveh C.

CONFIRMATION NO.: 9381

TITLE: POLYMERIC COMPOSITIONS COMPRISING QUANTUM DOTS, OPTICAL  
DEVICES COMPRISING THESE COMPOSITIONS AND METHODS FOR  
PREPARING SAME

I hereby certify that this correspondence is being deposited with the  
United States Postal Service as first class mail in an envelope addressed  
to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA  
22313-1450 on October 24, 2005.

*Bonnie S. Sheridan*  
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October 24, 2005

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. 1.56, 1.97, and 1.98, applicants' undersigned attorney brings to the attention of the Patent and Trademark Office the documents listed on the attached Form PTO-1449.

This information is being submitted under 37 CFR § 1.97(c) subsequent to the later of three months after the filing date of the present application or the mailing of the first Office Action on the merits, but before the mailing of a Final Action or the Notice of Allowance. A fee as prescribed by 37 CFR § 1.97(c)(2) and 1.17(p) accompanies this transmittal.

References 19-20 on the attached Form PTO-1449 are abstracts from a Materials Research Society conference held on December 1-5, 2003. On information and belief, these abstracts may have been published, e.g. at [www.mrs.org](http://www.mrs.org), prior to December 1, 2003 but later than December 1, 2002.

This is not to be construed as a representation that a search has been made or that a reference is relevant merely because cited. The filing of this information disclosure statement shall not be construed as an admission against interest in any manner.

Copies of Form PTO-1449, as well as any non-patent documents and foreign patent and foreign patent publications cited as references are enclosed with this transmittal.

Although it is believed that the appropriate fees are submitted with this transmittal, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to our Deposit Account No. 50-2542.

Early passage of the subject application to issue is earnestly solicited.

Respectfully submitted,

THE ECLIPSE GROUP

Date: October 24, 2005

By:



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FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office List of Documents Cited by Applicant	Attorney Docket No.: Chen 2-3-1-2-2 (LU05021USU)	Serial No.: 10/724,174
	Applicant(s): Chen et al.	
	Filing Date: December 1, 2003	Group: 2883

## U.S. PATENT DOCUMENTS

Examiner Initials	No.	Document Number	Date	Name	Class	Subclass	Filing date if Appropriate
	01	5,260,957	11/09/1993	Hakimi et al.	372	39	
	02	5,505,928	04/09/1996	Alivisatos et al.	423	299	
	03	6,473,551 B2	10/29/2002	Norwood et al.	385	130	

## FOREIGN PATENT DOCUMENTS

Examiner Initials	No.	Document Number	Date	Name of Patentee or Applicant	Country	Translation Yes   No

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initials	No.	Full Information Of Document
	04	Rodriguez-Viejo et al., "Cathodoluminescence and photoluminescence of highly luminescent CdSe/ZnS quantum dot composites", <i>Appl. Phys. Lett.</i> , Vol. 70, No. 16, pp. 2132-2134 (April 21, 1997).
	05	Dabbousi et al., "(CdSe)ZnS Core-Shell Quantum Dots: Synthesis and Characterization of a Size Series of Highly Luminescent Nanocrystallites", <i>J. Phys. Chem. B</i> , Vol. 101, pp. 9463-9475 (1997).
	06	Kang et al., "Low-Loss Fluorinated Poly(Arylene Ether Sulfide) Waveguides with High Thermal Stability", <i>Journal of Lightwave Technology</i> , Vol. 19, No. 6, pp. 872-875 (June 2001).

	07	Kim et al., "Fluorinated Poly(arylene ether sulfide) for Polymeric Optical Waveguide Devices", <i>Macromolecules</i> , Vol. 34, pp. 7817-7821 (2001).
	08	A. J. Nozik, "Quantum Dot Solar Cells", NCPV Program Review Meeting (National Renewable Energy Laboratory, Golden, Colorado) (October 14-17, 2001).
	09	Tessler et al., "Efficient Near-Infrared Polymer Nanocrystal Light-Emitting Diodes", <i>Science</i> , Vol. 295, pp. 1506-1508 (February 22, 2002).
	10	Smith, Jr., et al., "Perfluorocyclobutyl Copolymers for Microphotonics", <i>Adv. Mater.</i> , Vol. 14, No. 21, pp. 1585-1589 (November 4, 2002).
	11	Wang et al., High Performance Polymer Waveguide Devices via Low Cost Direct Photolithography Process", Optical Fiber and Planar Waveguide Technology II, Proceedings of SPIE, Vol. 4904 (2002).
	12	Ballato et al., "Optical properties of perfluorocyclobutyl polymers", <i>J. Opt. Soc. Am. B</i> , Vol. 20, No. 9, pp. 1838-1843 (September 2003).
	13	"Perfluorocyclobutane (PFCB) polymer", 6 pages, printed 09/25/2003 from <a href="http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcb1.html">http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcb1.html</a>
	14	"PFCB Optical fiber and waveguide", 3 pages, printed 09/25/2003 from <a href="http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcphoton.htm">http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcphoton.htm</a>
	15	"PFCB polymers containing CLD type polyene chromophore", 1 page, printed 09/25/2003 from <a href="http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcbeo.htm">http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcbeo.htm</a>
	16	"PPO containing polymers for potential space applications", 1 page, printed 09/25/2003 from <a href="http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcbspace.htm">http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcbspace.htm</a>
	17	List of Key Publications, 1 page, printed 09/25/2003 from <a href="http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcpub.htm">http://chemistry.clemson.edu/ChemDocs/smithgroup/pfcpub.htm</a>
	18	Javier et al., "Quantum Dot-Organic Oligomer Nanostructures: Electronic Excitation Migration and Optical Memory Design", <i>Mat. Res. Soc. Symp. Proc.</i> , Vol. 776, pp. Q2.1.1-Q2.1.6 (2003).
	19	Sundar et al., "Integration of visible and IR-active semiconductor nanocrystals with optical lithographic processing," MRS Fall Meeting, Abstract No. K12.10 (Boston, MA) (December 1-5, 2003).
	20	Sundar et al., "Linear and Nonlinear properties of semiconductor nanocrystals in polymer based planar waveguides," MRS Fall Meeting, Abstract No. N15.50 (Boston, MA) (December 1-5, 2003).

EXAMINER \_\_\_\_\_

DATE CONSIDERED \_\_\_\_\_

\*Examiner Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.